



PHILIPS

UNIQUE 2

Digital radiography

UNIQUE 2 – Philips' next generation image processing for clinical excellence in digital radiography

Key advantages

- Improved diagnostic image quality through better detail visualization
- Optimized representation of clinical information by dedicated processing presets for each patient/exam type
- Fast, easy image processing customization for specific diagnostic demands

With UNIQUE 2, Philips introduces the next generation image processing software. Offering more flexibility to balance image contrast and using an improved noise reduction algorithm, UNIQUE 2 meets the evolving challenges of image quality in digital radiography.

UNIQUE 2 provides excellent contrast harmonization with enhanced details across many exams and many patients by focusing on the most diagnostically relevant structures.

Through the intuitive user interface, image parameters can be customized easily for each anatomy. Specific settings for your standard clinical routines can be amended and easily stored.

Optimized representation of clinical information by dedicated processing presets for each patient/exam type

UNIQUE 2 offers dedicated presets, specifically tailored for all anatomies and virtually all patient types. These presets work automatically, and are tuned to the patient type (adult, child or infant, slim or obese) and the requirements of the examination. They allow UNIQUE 2 to be fully automatic, very easy to use, and provide a well-balanced representation of the clinical image, in every case.

Fast, easy image processing customization for specific diagnostic demands

UNIQUE 2 may easily be adjusted to specific diagnostic demands. Image processing parameters can be individually tailored onsite by Philips specialists or the super users, to meet every specific clinical challenge. Operation and customization of image processing using UNIQUE 2's intuitive user interface is fast and easy. All adjustments become instantly visible, in excellent quality, on the 2K monitor. Once created, any custom-made parameter set is automatically applied in daily routine.

Seamless interaction with Philips Bone Suppression¹, SkyFlow Plus and Eleva User Interface

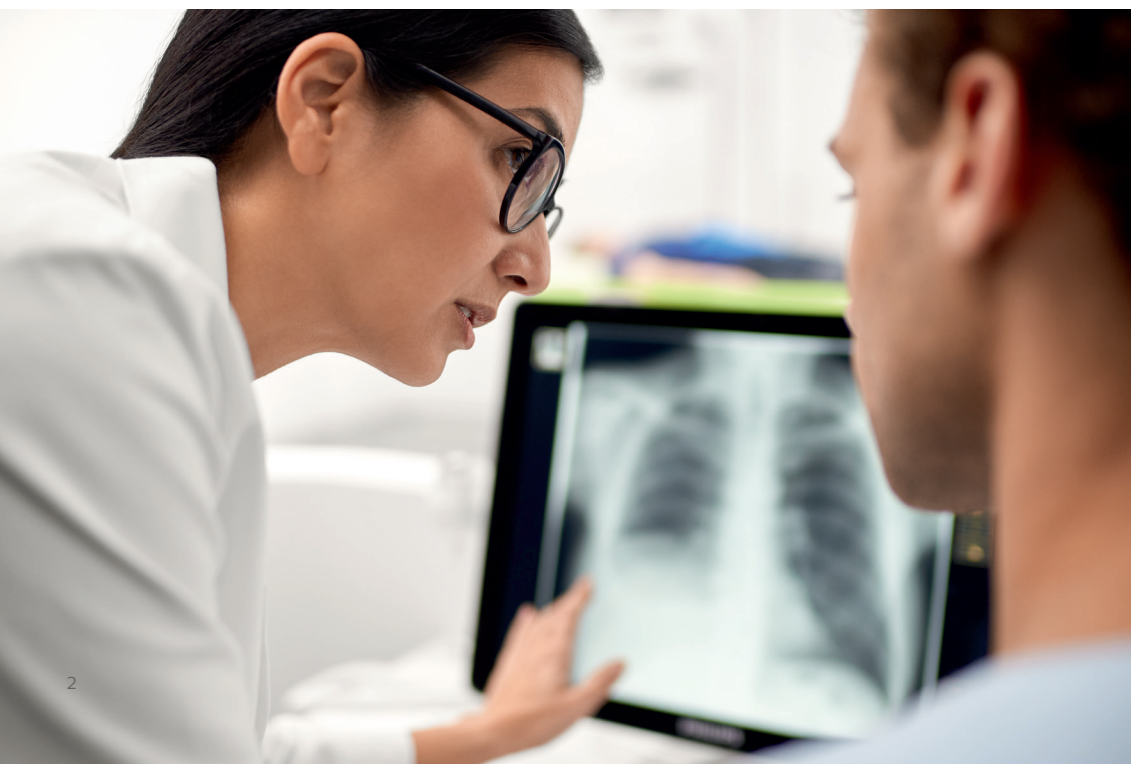
UNIQUE 2 works perfectly in conjunction with Philips Bone Suppression software. This is an option to remove bone structures from chest images for an unobstructed view of soft tissue. This clear view enables a more confident image interpretation. It improves actionable lung nodule detection by up to 16.8 %.²

UNIQUE 2 also works seamlessly with SkyFlow Plus, which is a digital scatter correction technology that automatically provides grid-like images without the need of a grid. SkyFlow Plus is fully automatic, patient-adaptive, and works without special attention.

Additionally UNIQUE 2 is seamlessly integrated into the Eleva platform – a standard on all Philips X-ray imaging equipment.

¹ Riverain Technologies' ClearRead Bone Suppression

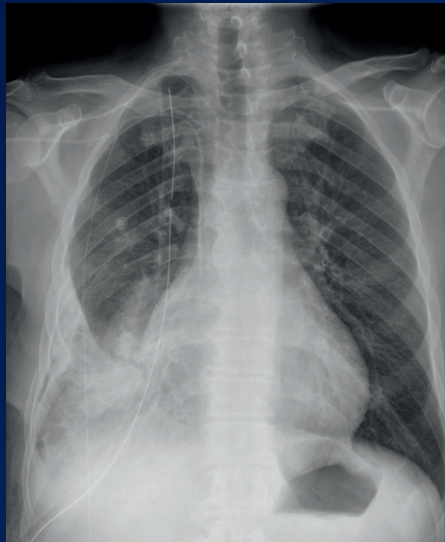
² Freedman M, et.al. Improved detection of lung nodules with novel software that suppresses the rib and clavicle shadows on chest radiographs. Radiology 2011.



UNIQUE processed images



UNIQUE 2 processed images



More detail, easy customization

Improved diagnostic image quality through better visualization of subtle details

UNIQUE 2 advantages	Proofpoints
UNIQUE 2 has clearly proven its advantages in an image comparison study.	80.1 % of the radiologists' votes have shown preference or equivalence compared to UNIQUE. ³
UNIQUE 2 permits the selective enhancement of specific anatomical structures to increase detail visualization and to support diagnostic confidence.	For the visualization of lung vessels in chest images, UNIQUE 2 received 79.4 % of the preference votes vs. UNIQUE. ³
UNIQUE 2 brings detail to very dark and very bright image regions by accurately balancing contrast levels and offering extended flexibility to adjust contrast.	In pediatric hand images, UNIQUE 2 enhances contrast by 54.7 % compared to UNIQUE. ⁴
UNIQUE 2 features a novel algorithm to suppress noise.	Phantom measurements have shown a noise reduction of 17.3 % in abdominal areas compared to UNIQUE. ⁴
UNIQUE 2 significantly improves the homogeneity of the background area. It effectively suppresses any background glow or inhomogeneity, which may distract the reader.	In pediatric knee images, UNIQUE 2 improves the background homogeneity by 96.7 % compared to UNIQUE. ⁴
UNIQUE 2 provides a more consistent image impression, even across different patient types, by improving the consistency of the background area.	For pediatric knee images, this improvement is 100 % compared to UNIQUE. ⁴

³ Results of a blinded image reading study (UNIQUE 2 vs. UNIQUE)

⁴ Results of a technical image comparison study (UNIQUE 2 vs. UNIQUE)

